REMARKS

Claims 16 through 21 are currently pending in the application.

Claims 1 through 15 have been canceled without prejudice.

Claims 16 through 21 are rejected. Applicant proposes to amend claims 16 through 21, and respectfully requests reconsideration of the application as proposed to be amended herein and in view of the arguments set forth below.

This amendment is in response to the final Office Action of March 17, 2004.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on Ackmann (U.S. Patent 6,271,602) in view of Tanaka (U.S. Patent 5,128,283)

Claims 16 through 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ackmann (U.S. Patent 6,271,602) in view of Tanaka (U.S. Patent 5,128,283). Applicants respectfully traverse this rejection, as hereinafter set forth.

Applicants ASSERT that to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the cited prior art reference must teach or suggest all of the claim limitations. Furthermore, the suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure.

Applicants respectfully assert that any combination of Ackmann and Tanaka fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 regarding the presently claimed invention because there is no suggestion whatsoever for any combination thereof, and any combination of the cited prior art does not teach or suggest all the claim limitations of the presently claimed invention.

Claim 1, as proposed to be amended herein, recites a method for forming an overlay target, including depositing a second layer of material over a portion of the upper surface of the

substrate, the upper surface being substantially free, as deposited, of depressions in the portion thereof covering the overlay target in the substrate, the lower surface of the second layer of material contiguous with at least a portion of the overlay target. Applicants submit that any combination of Ackmann and Tanaka fail to teach or suggest all of the limitations set forth in claim 1, as proposed to be amended herein. Specifically, Ackmann fails to teach depositing a second layer of material, the upper surface of the layer being substantially free, as deposited, of depressions in the portion thereof covering the overlay target in the substrate, the lower surface of the second layer of material contiguous with at least a portion of the overlay target. Ackmann teaches a method for processing a semi-conductor substrate where an alignment mark is formed in the semiconductor substrate. An oxide layer 206 and nitride layer 208 are formed above semiconductor substrate 200. Masking layer 210 is formed over layers 206 and 208. See Figure 7. Accordingly, independent claim 16, as proposed to be amended herein, is allowable as well as dependent claims 17 through 19 therefrom.

Obviousness Rejection Based on Ackmann (U.S. Patent 6,271,602)/Tanaka (U.S. Patent 5,128,283) in view of Chiou (U.S. Patent No. 5,883,012)

Claims 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ackmann (U.S. Patent 6,271,602)/Tanaka (U.S. Patent 5,128,283) in view of Chiou (U.S. Patent No. 5,883,012). Applicants respectfully traverse this rejection, as hereinafter set forth.

Applicants respectfully assert that any combination of Ackmann/Tanaka and Chiou fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 regarding the presently claimed invention because there is no suggestion whatsoever for any combination thereof, and any combination of the cited prior art does not teach or suggest all the claim limitations of the presently claimed invention.

Claims 19 and 20 are each allowable, among other reasons, as depending from claim 16 which should be allowed.

Claim 20 is further allowable because neither Ackmann/Tanaka nor Chiou teach or suggest providing a semiconductor substrate having a top surface, a bottom surface, and a material layer deposited over the top surface and etching the substrate to form the overlay target,

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the step of etching the substrate comprises etching the material layer. Chiou teaches forming a masking layer on a substrate. Openings are formed in the masking layer to expose the portions of single crystal substrate that are to be etched. The trench structure is formed in the single crystal silicon substrate. Neither Ackmann/Tanaka, nor Chiou, nor any combination of Ackmann/Tanaka and Chiou teaches or suggests etching the material layer to form the overlay target.

Obviousness Rejection Based on Ackmann (U.S. Patent 6,271,602)/Tanaka (U.S. Patent 5,128,283) in view of Ghandhi

Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ackmann (U.S. Patent 6,271,602)/Tanaka (U.S. Patent 5,128,283) in view of Ghandhi. Applicants respectfully traverse this rejection, as hereinafter set forth.

Claims 21 is allowable, among other reasons, as depending from claim 16 which should be allowed.

Applicants request entry of this amendment for the following reasons:

The amendment is timely filed.

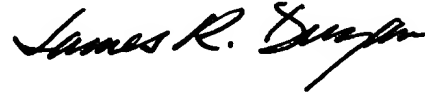The amendment clearly places the application in condition for allowance.

The amendments are supported by the as-filed specification and drawings.

Further, the amendments do not raise new issues or require further search.

In summary, Applicants submit that claims 16 through 21 are clearly allowable over the cited prior art.

Applicants request the allowance of claims 16 through 21 and the case passed for issue.

Respectfully submitted,

James R. Duzan
Registration No. 28,393
Attorney for Applicant(s)
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

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